TRAPEZE NETWORKS

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Mobility Exchange® MX-2800

DATA SHEET

Mobility Exchange MX-2800

Intelligent WLAN Controller for data center deployment. It offers 28 Gbps of switching throughput and supports up to 512 802.11n APs.

The Mobility Exchange (MX®) family of intelligent WLAN controllers provide the platform for Trapeze Smart Mobile® wireless networks.

Mobility Exchange MX-2800

The MX-2800 is the latest generation of WLAN controllers from Trapeze Networks. Designed for data center or distributed wiring closet installations, the MX-2800 enables seamless and secure deployment of enterprise class wireless networks over any existing L2/L3 network without disruption. It brings unprecedented scalability, manageability, reliability and resiliency features to WLAN networks, mirroring the user experience of wired networks.

Powered by Trapeze's unique hardware-accelerated WLAN processing engine and a high speed security co-processor, the MX-2800 scales to support the most demanding wireless applications indoors and outdoors, including voice over Wi-Fi for thousands of users. It offers 28 Gbps of throughput and supports up to 512 802.11n APs while providing NonStop availability and hitless failover with no service interruption, even in the unlikely event of a controller failure.

Operating in conjunction with Trapeze Mobility Point® (MP®) access points, and Mobility System Software™(MSS™), MX controllers can offload policy enforcement and data forwarding to the MPs, resulting in optimized traffic flow, radically reduced latency, and massive scalability.

The MX-2800 combines L2 Ethernet switching, stateful per user and per service firewalls, wireless intrusion protection, 802.1Q trunking and per VLAN spanning tree (PVST+), complete wired to wireless quality of service (QoS), and automated RF management.

Clusters of MXs form a Mobility Domain™ which provides seamless roaming, intrusion protection and RF management over large single site wireless LAN deployments. A Network Domain™ interconnects Mobility Domains to enable identity-based networking across wide geographic regions.

MX controllers can be configured as a virtual controller cluster to provide many-to-many redundancy, without needing expensive hot standby controllers. This enables NonStop Wireless availability for all sessions, even voice calls in the event that a controller goes offline for any reason.

The MX-2800 uses the same Mobility System Software as all other Trapeze MX controllers. For more information about the security and networking capabilities of the MX-2800, please read the Mobility System Software data sheet.

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Key Features

Scalability and Reliability	
Number of managed Access Points	• Up to 512 APs in increments of 64 Access Points licenses
Platform Reliability	• Hot pluggable redundant power supply • Hot pluggable fan tray module
Network Reliability	• EtherChannel™ load-shared, redundant links • Spanning tree and per-VLAN spanning tree (PVST+) • Resilient network attachment via any MX port • N:1 and N:N redundant MX capabilities
Security	
Authentication	• Supports complete local AAA authentication, including 802.1x, as primary or backup to a centralized AAA server • Supports multiple AAA server groups and can load share across multiple AAA servers or within a server group • Generates and manages X.509 digital certificates • Assigns and enforces per-user authorization policies that are managed centrally from the AAA back-end • Authorizations include virtual private group membership, personal firewall filters, time-of-day/day-of-week access, encryption type, and location-specific policies • IEEE 802.1x with multiple EAP types (TLS, PEAP/MSCHAP, TTLS) • WebAAA, MAC, Open • Wi-Fi WPA2 Enterprise certified
Encryption Key Management	• Encryption distributed in Mobility Point access points • MX generates master and session keys • Provides key management for each encryption technique
Management and Control	
Management access	• Command Line Interface (Console serial port, telnet, SSHv2) • WebView web access (https) • SSL, XML (to RingMaster®) • SNMP v1, v2c, v3 • Syslog support for system monitoring • Detailed audit logging for change control • Remote packet capture ability for advanced troubleshooting
RF Management	• Automated MP Power/channel auto-tuning • Dynamic Frequency Selection (DFS)
User management and statistics	• Detailed per user per session RF accounting statistics and management • Tracks the location, roaming history, virtual private group, network addresses, state, activity, errors, usage and other attributes by user name, session, VLAN, or user group • Provides per user audit trail and chargeback capability through the accounting component of AAA
MP management and control	• Configures and controls MPs; controls third party APs • The MX is categorized as an access controller (AC) that supports direct, switched, and routed connections • Enables data forwarding in MX or in MP with Smart Mobile technology • Multiple MXs provide resilient control

Specifications

Hardware Specifications	
Dimensions (W x D x H)	• 17.4 in x 18 in x 2.594 in • (44.19 cm x 45.72 cm x 6.58 cm)
Weight	• 18 lbs (8.1 kg) with one power supply • 19.5 lbs (8.77 kg) with two power supplies
Interfaces	• 8 x Gigabit Ethernet Small Form-Factor Pluggable (SFP) ports • 8 x 10/100/1000Mbps Ethernet RJ45 ports • 2 x 10 Gigabit Ethernet Small Form-Factor Pluggable (XFP) ports
Environmental	• Operating temperature: 0ºC to 40ºC • Storage temperature: -40ºC to 70ºC • Humidity: 10% - 90% (non-condensing)
Power	• 100-240 VAC 50-60 Hz, 108W peak with dual PSUs fitted
Standards Requirements	
Regulatory Safety	• UL 609501-1, CB IEC 609501-EN, CSA C22.2 NoO, 60950-1-03
EMI/EMC	• FCC Part 15 Class A • ICES Class A • VCCI Class A • EN 55022 Class A • EN 55024 • EN 60601-1-2 • CISPR 22 Class A • Taiwan: CNS 13438 Class A • China: CCC GB 9254-88 Class A • Australia/New Zealand: AS/NZ 3548 Class A
IEEE Standards	• 802.1x Port Based Network Access Control • 802.3i 10BASE-T Ethernet • 802.3u 100BASE-T Fast Ethernet • 802.3ab 1000 BASE-TX Gigabit Ethernet • 802.11 a/b/g/n, 802.11d, 802.11e, 802.11h, 802.11i • 802.1D Spanning Tree • 802.1Q VLAN tagging • 802.3ad (static config)

Ordering Information

MX-2800-xx	• MX-2800 with two 10 GbE XFP ports and 8 x 1000Base-T (RJ-45 and SFP) ports, including 64 MP license, single PSU.
MX-2800-U64	• 64 MP license upgrade for MX-2800 (max. 512 MPs)
MX-2800-PSU-xx	• PSU for MX-2800 redundant power or spare
	• xx = NA - North America, EU - Europe, UK - United Kingdom, JP - Japan, AU - Australia and China

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